



Grain

AUGUST, 1942

NEW RULING ON ALLOCATIONS

WPB Priorities Regulation No. 10 has been revised and now will be called the "Production Code," according to word from Ray Bowden of the Grain & Feed Dealers National Association, Washington, D. C. Letter symbols now will be only three in number, namely: "A" for Army, "N" for Navy, and "X" for all other purchasers. Heretofore readers of GRAIN have been requested to use "DP" for terminal and sub-terminal grain handling plants, "DP 13.00" for feed manufacturing, and DP 14.00 for flour mills, etc., as previously outlined. Elevators connected with processing plants are considered a part thereof, and in the purchase of equipment and supplies must show the allocation number assigned thereto. Purchases of grain hereafter require no letter or numerical allocation classification symbols.

Hereafter the symbol "X" will replace the "DP," all numbers following remaining the same, with no number yet assigned to grain merchandising plants. As before, purchases from retailers are exempted, as are purchases of raw materials prior to processing or fabricating, service, imports, etc. Repair and maintenance materials will be purchased under "X-24.99," and capital improvement purchase orders "X-21.10."

CANADIAN PRIORITIES NO. 1

Canadian Priorities Regulations No. 1 are reported to be identical with USA's No. 10. Perhaps a good old fashioned wailing wall might be used sympathetically at the next SOGES convention.

PREFERENCE RATINGS AVAILABLE

Preference rating certificates can be secured from WPB if you go after them, states a report dealing with obtaining magnetic separators for eliminating spark-striking metals from the grain stream. Such equipment is installed in the Calumet Elevator, Chicago, and is proving out well.

Terminal on Postage Stamp

SASKATCHEWAN Pool Elevator No. 4 at Port Arthur appears on Canada's new issue of war stamps of the 4c denomination. The 6½ million bushel house is shown loading a boat.

LOOK CLOSELY FOR TERMITES

Pouring discarded lubricating oil at every point where your wood elevator structure comes close to the ground is one sure way of keeping out destructive termites, according to Prof. J. C. Cross of the Texas College at Kingsville. In case of concrete plants or foundations, oil poured into small ditches dug around their edges accomplish immunity for years.

SEASONAL EXEMPTION AVAILABLE

"GRAIN" wishes to again call the attention of its many readers to the seasonal exemption granted the grain handling and processing industry from the burden of paying time-and-a-half for hours beyond forty per week during any selected fourteen weeks of the calendar year. You may work your employees as much as twelve hours a day or as much as fifty-six hours a week without paying time-and-a-half—just the regular hourly rate. Any fourteen weeks are okay.

'ROUND THE CLOCK AT WICHITA

Wichita elevators have joined defense plants and are working around the clock to keep their unloading tracks cleaned up.

FORM RIDING CLUBS!

ODT states it is essential that something be done on this share-our-cars - and - spare-our-tires proposal—and done in a hurry! This rubber shortage must be coped with and brought home quickly. "Failure to



participate in Group Riding plans is to waste rubber," Director Joseph B. Eastman states, "and wasting rubber in the light of today's condition is nothing short of disloyalty to the war effort." Help form them now. Production lines must not be stopped by our selfishness!

MOUNTS FLAG ATOP PLANT

"WE'RE going to keep it flying until we lick the Japs and wipe out Hitler," Super Earl Mahan of Council Bluffs is quoted as saying upon mounting a huge American flag atop Butler-Welsh's 220-foot "Gateway" Elevator. Mr. L. R. Welsh purchased the flag and the crew erected the pole.

Has Bill Paid Up?

"Booster Bill" is okay. He should go over very well. Has he paid his current dues (?) because if he hasn't I want the privilege of going after him!—Lou Ambler, The Glidden Company, Chicago.

HEADS SCRAP HARVEST

Harry A. Bullis, Executive Vice President of General Mills, Inc., heads the "Scrap Harvest" Committee for WPB in the Milling Industry. He has asked that each company appoint a responsible official to assist in any way possible the local General Salvage Committees that have been established in 12,000 communities.

Every grain handling and processing plant should be a virtual "goldmine" for iron and steel scrap, non-ferrous metals, scrap rubber, rags, manila fiber and other salvage materials that are essential to war production. Every reader of "GRAIN" is urgently requested to co-operate in this important work.

THIEVES STEAL WIRING

About \$3,000 in copper wiring and electrical equipment was recently removed from the Cargill elevator in Maumee, Ohio, by thieves entering the marine tower some distance from the elevator.

100% FOR 10% DEDUCTION

Our plant went 100% for the 10% payroll deduction for bonds.—Oscar W. Olsen, Globe Elevator Division, F. H. Peavey & Co., Duluth.

MINIMUM DIET

Some place we read that the nutritional experts were about to announce their findings on the very minimum standard diet—with emphasis on the minimum. It is so much more in some ways, and so different in others from the usual 3-squares a day that we give it to you for whatever its worth.

Weekly per capita (adult) consumption: 7 quarts milk; 4 pounds meat; 3 pounds vegetables and fruits; 7 eggs, and ¾ pound butter.... At this rate some of the "victory" gardens will almost have to become permanent adjuncts.

45,000 BOMBERS LOST!

It has been estimated that common illnesses cost industry around 400,000,000 man-days a year—enough to build 45,000 bombers.

SAYS FUTURE BRIGHT

I HAVE had called to my attention your magazine "GRAIN," the trade paper you have for terminal elevator managers and superintendents. It seems to me there is a place for "GRAIN" in the terminal elevator field, and if the succeeding issues come up to the current one, the future should be a bright one indeed.—W. D. Clark, Manager, Scale Department, Fairbanks, Morse & Company, Chicago.

discrepancies in moisture tests

BY HAROLD WILBER, A. E. STALEY MANUFACTURING COMPANY, DECATUR, ILL.



BEFORE SOCIETY OF GRAIN ELEVATOR SUPERINTENDENTS

THE moisture content of grains is one of the grading factors in which the grain handler and the processor are most interested. It is moisture content which not only enters to such an extent in the figuring of the yield, but it is one of the considerations in the keeping quality of the grain. Moisture is prevalent in all of the grains which we handle, but the determination of this moisture content is one of the most difficult analyses to make.

Those of us who came through the country grain business know of the time when we bought just "wheat" or "corn" or bushels or acres. Margins were wide and the law of averages helped take care of the dealers throughout the average crop. Competition became stronger, margins narrowed, and grain was purchased in the country with such a stipulation as, "if it is dry and all right." Competition continued to strengthen and the country started to buy grain on grade. The ordinary farmer looked at this with some suspicion. As to moisture, his grain was generally dry even if his neighbor's grain was on the damp side.

Then came the Brown-Duvel tester. The farmer saw the grain weighed, the moisture boiled out and measured. Although he might not admit it, on the way home he sort of figured that if the water was accurately measured, it might be somewhere near right. He did not know of the many things which affected the test. The checking of the rate of heating, an accurate shut-off, the amount of oil used, the height of the thermometer in the oil and a lot of other things were thought little about. He did not know that we actually manufactured water in the process of heating, and he did not know that we vaporized only a part of the water in the grain to off-set this. When we burn a gallon of gasoline in the family car we make water vapor which if condensed would make almost a gallon of water—but gasoline is not by any means 100% water.

From that day, we have made some steps forward but certainly we have a long way to go yet.

Electrical Devices in Favor

THE chemists attempt to determine moisture by several methods. There are the ovens of different kinds using different temperatures, some in presence of gases, different conditions, some at atmospheric pressure and some with vacuum, some with dessicants and a lot of other variations.

In most of the high temperature ovens we know that oxidation takes place affecting weight. We know of the volatiles other than water driven off to upset calculations. We know that when molecules of H. C. and O. rearrange themselves there is formed some H_2O , CO and CO_2 .

At present, the electrical devices are in favor. Some measure by conductivity and some by capacitance. Moisture content does affect electrical resistance but it is possible that other things may do the same. Temperature is corrected for with a lead pencil (at present using a constant, when it is known that is a variable).

It can be shown that the variety of bean has some effect. What about the same variety grown under different conditions of soil and climate? What about the effect of damage and different kinds of damage? We may take ten different alloys of copper all 99.9% pure, but the character of that other 0.1% will have the effect of varying electrical resistance over a large range. These different factors should be systematically investigated and either make up our minds to disregard them as negligible or set up corrections to take care of them. [The capacitance machines seem less affected by mixtures.]

The Brown-Duvel is the most widely known of the distillation methods and its short comings are recognized. Distillation with toluene and benzine are coming into the picture and seem to have some promise. These two methods seem to discolor and decompose the material being tested to a small degree.

The extraction methods take into consideration the volatiles other than moisture. The De Bruyns method and the reversibility studies are techniques for the experienced chemist in the modern laboratory. The corn prod-

ucts industry have been working on the possibility of actually determining the apparent moisture in corn and seem about ready to answer that it is possible, particularly on finely ground corn.

Drier Shrinks Jumping

OUR present yard stick, the Tag, has one advantage in that it is sort of a fool-proof method which will check itself fairly well in different offices. The soy bean industry is not only interested in a method which will check itself, but in one which will serve as a yard stick for this complex mixture of water and dry matter, both going to and coming from the process, after known losses are deducted. Dry matter basis yields at present do not check. You who have been drying beans have found to your sorrow that drier shrinks as determined by weights in and out are considerably more than the Tag determinations indicate.

Eggs were sold at one time just as eggs. Now the customer who wants large eggs and is willing to pay the price can buy them by weight and be assured that the eggs are as large as he expected. For the ordinary middle sized egg, deals are made with perfect confidence on both sides. There is a market for the small egg and the customer who buys them knows just how small they will be. The soy bean processor is buying this complex mixture of dry matter and water blind-folded. The different methods



for weighing his eggs are not satisfactory. They are measured with one yardstick coming in and another going out. He is willing to pay full price for his eggs, but as yet he has no way of seeing just what he gets.

Air Oven Found Low

THE oven is given us as the last word. We wonder if we are not in somewhat the same position as the farmer and the Brown-Duvel. The Department gives directions for the use of both the water and the air oven. The last sentence of the instructions in each read "replicate de-



There's a Great Deal of Difference!

At least there should be. While both employ toxic gases, one is designed to eliminate men in warfare, the other insects in grain.

Yet certain highly lethal gases have been introduced into grain elevators that would be better suited to chemical warfare.

It would be natural to think that war gases and similarly hazardous compounds would prove useful in grain fumigation. But most of them don't work out when they get in the elevator. The conditions there are very different than they were in the laboratory. The investigator finds that laboratory conclusions don't mean much in practical grain fumigation.

Accordingly, most attempts to introduce highly toxic chemicals in this field have brought hazards to users without any greater advantage in effectiveness. Often such compounds have been complete "flops" on results.

"Safety" is a relative word in grain fumigation. No fumigant which will kill insects is without danger to man. But there are many products which are relatively non-hazardous—safe to use under elevator conditions. Another small group of products may be used with special precautions because their manufacturers grant their hazards.

The class of products we refer to as "hazardous," however, have no place in a grain elevator, in our judgment, because they are insidious and have already caused or are likely to cause death or health injury to users.

Therefore, we frankly warn, "Let the buyer beware."

Sincerely yours,

THE **Weevil-Cide** COMPANY
THE DEPENDABLE GRAIN FUMIGANT

1110 HICKORY STREET
 KANSAS CITY, MO.

terminations should check within 0.1%. They should also check on dry matter basis on whole beans as well as product.

The corn products industry has found that using whole corn, the air oven runs low compared with the "apparent" moisture in the ordinary range about 1.9%. By the same yardstick the water oven runs around 2% low. The Tag runs from 1.16 to 2.35. We have tried to tie the Tag to the ovens, but the ovens do not agree and the Tag runs below the ovens.

A new set of conversion tables was issued for the Tag just before the movement of the last crop, lowering the moisture on beans from 0.6% to 0.9%, and left the determinations of the higher ranges up to an extension formula. Is it any wonder that we cannot tie our shrinks to our moistures in and out? Was the first set of tables incorrect all of these years?

Carload of Rainbows?

CALIBRATIONS of the Tag have evidently been made on laboratory samples of beans which have tempered to each other and within the individual berry. We must take into consideration that country run beans as they arrive in the car are distinctly a mixture, covering sometimes quite a range. If we had some sort of "litmus" like color indication for moisture—the wet ones being red, the drier ones being blue—we would have all sorts of rainbow stratas in the car. We would have red streaks, blue streaks, violet streaks. On looking closer we would find red beans with blue spots and visa versa as the wet and dry beans touch each other. In other words, the country run probe sample and the tempered laboratory sample are two distinct breeds of pups.

It has been suggested that trials be given the low temperature oven in vacuum over a dessicant in presence of certain gases. Also distillation with toluene or benzene may have possibilities. We all ask only one thing, to tie yields on a dry matter basis to beans in and product out. Why not tie our moisture methods to process yields? In other words, why not a yardstick which will work both ways?

At this time it is up to the bean processor to produce every pound of food that is possible—and then it will not be enough. No one must fall down in producing a single pound that is so badly needed by someone somewhere. The profit, welfare or convenience of anyone must not stand in the road. We must all work to that end—and to work to the most productive end we must have tools and gauges upon which we can depend.

The bean processor, as any other manufacturer, must look after the division of the product dollar. The owners who furnished the capital to buy the tools must have his share, the management must have its fee for keeping the wheels in motion, the man who uses the tools must have his just

part and the man who produces the raw material must have each unto himself as it is due him,—but in order to do this last thing we must know the size of our eggs.

DUAL GRADING OF GRAIN

By C. E. Grossman, Scoular-Bishop Grain Company, Omaha, before Society of Grain Elevator Superintendents

DUAL grading is the practice of issuing two or more grades on a car that has inferior grain loaded in the bottom. This does not refer to cars loaded in layers—classed as "unevenly loaded."

When a re-inspection and Federal appeal are called on a car of this type, the sampler takes what is called a set up, or a sample of the good grain, and a sample of the inferior portion. Then the car is graded according to the estimated amount of each kind of grain left in the car. They will probably grade a part from 20 to 50% of what remains in the car a lower grade—and we get a discount on this part.

What about the time element and our operating cost? It takes about as long to unload a car like this as it would to unload three cars—and



when we are fighting demurrage, it means three debits, or \$6.60. When we run into a car of this type, most of the time there is from 30 to 60,000 lbs. out of the car. We don't know what the actual grade of this grain is, because we certainly have a part of the inferior grain in it. It probably has enough that we should get a discount on it, but how are we going to do it?

Between Devil and Deep

IF WE drop it back in the car, they won't be able to reach the bottom and we can't get an official grade in the scale. We sometimes hear the remark that the sampler got a poor sample. We know that the regulation probe is 67½ inches long and when a car has seven to eight feet of grain in it we won't get any of the last two or three feet, regardless of how carefully a car is sampled. Most grain and elevator men know this. In houses having small scales where two drafts are made of all cars, the chances are that most of the draft is back in a bin, by the time we find the grain in the bottom.

Let's see what the approximate cost to us would be, taking car billed in at 120,000 lbs. and have it half un-

loaded when we discover what is in the bottom. Labor cost will vary, depending upon the location and size of the crew, so take two shovelers at 60 cents an hour and we have \$2.40 for labor, 3 debits, or \$6.60. We have a thousand bushels of grain that we should get ½c or more discount per bushel, say \$5.00—a total of about \$14.00 plus the labor cost of the rest of the crew, and the headaches that go along with this kind of car.

Say they give us a grade of "sample" on one-half the balance, about 500 bushels, and our firm gets a discount of 3c a bushel on it, or \$15.00. When we add the labor cost of the balance of our crew to that of our shovelers, it costs us more to handle this kind of car than we get out of it.

If we sell the balance of the car to someone else, we still have most of the above cost, plus the switching charges. So why should we and our firm be penalized? I have known of cases where it has taken as long as three hours to unload cars of this type, and know of a few cases where the cars were graded as plugged.

All of which reminds me of something that happened to me some years ago. I received a very nice letter from a country station manager stating that car so-and-so loaded with about 85,000 lbs. had some bad grain in the bottom put there by a mistake of one of his employees. Would we please try to separate it for him. This station shipped us quite a bit of grain so we spent several hours unloading this car and gave him the amounts of each kind of grain. We received a few more cars from him and they were put in a small bin. When I went to load out, using about 25% of this, I discovered that the letter and first car was just adding insult to injury, because the inferior grain in the bottom was no mistake.

A lot of us have cars fall down from time to time on damage or something else. When the office asks about it we tell them we don't know what happened, that we weren't using anything like that. Yet I believe that a lot of our trouble, especially on damage, is due to cars loaded with inferior grain in the bottom that we missed when unloading. All of us know that one way to stop this is for the whole car to be graded on the inferior portion.

I understand that the inspection offices are working on instructions issued to them. They look at it this way. How do we know that the grain was put there with the intention of concealing it; well, give them the break on the first car. But couldn't some system be worked out where shippers of a car of this type would be posted at all federal inspection offices so that any reoccurrence of that kind of loading could be checked?—and enough penalty placed on them so that this kind of loading would not be repeated.

THE WHYS OF LEAKING

A UNIT of round tanks is subject to weather deterioration, expansion and contraction due to temperature changes and expansion of each individual bin when filled and emptied. In addition to this, we are unable to cover up our mistakes as the builder, say, of a hotel building, does, so that any cracks are not only obvious but a source of annoyance and sometimes expense to the owner of the elevator.

Our experience has shown that the principal causes of serious trouble are either an inadequate or poorly designed foundation, poor concrete materials, careless workmanship or, as is more likely, a combination of these things.

To start with, all your tanks should be so designed that the foundation under them is on one level, as otherwise you are almost sure to get unequal settlement in various parts of the structure. Ninety-five per cent of the trouble we have had in the past has been on jobs where we used a conveyor tunnel with the tunnel slab being at a lower level than the tank slab.

Tunnel Causes Cracks

ALMOST invariably the ground is harder at the tunnel level, and consequently the tunnel does not settle as much as the tank slab, resulting very often in cracks about half way up in the bin walls. This has been such a common occurrence that except under unusually favorable conditions we have quit designing any tanks this way.

"We had occasion several years ago to repair some tanks which were constantly opening up new cracks. We found that the interstices between the tanks were so large that when the interstices were filled and the tanks were empty, the grain pressure was enough to cause an actual movement

of the tanks on their foundation. This naturally led to cracking of the bin walls. In this case, we built some circular walls in the interstices to take this pressure, and since then there has been no further trouble. These cases of structural defects, however, are rare.

"Careful workmanship and the use of better materials is an important item in eliminating cracking. There are some locations where a sandy gravel is available very cheap, and it seems foolish to pay a high price for crushed rock to mix with this to produce your concrete. We got stung a couple of times using this fine aggregate, as in at least one case we know of it was a definite factor in causing some cracking. Much more often, however, trouble comes from careless placing of the reinforcing steel and sloppy mixing of concrete.

No Choice in Matter

AT times the builder doesn't use as much cement as he might. We have all learned during the last years that it is very important to keep down the amount of water used in mixing concrete as much as possible,

but we have also found that no matter what else you do it is impossible to make the concrete too good, and the other conditions being equal, an elevator built of good, rich uniform concrete will stand up better than otherwise. As a matter of fact, I would rather put in a 6-inch concrete wall that I know is virtually perfect than a thicker wall mixed under haphazard conditions.

At the present time, there are materials available with which elevators may be treated, provided the protection necessary against weather and forming a flexible coating. Ordinary paint does not help matters."

—A.O.M. Bulletin.

FREAK COMPLICATIONS

MOST of the spouts were blown from the bottoms of the bins in the conveyor tunnel in the recently reported Lubbock (Tex.) explosion. Repair was considerably hampered inasmuch as the tanks emptied into the tunnel and some 700,000 bushels of grain had to be reclaimed before starting. Another reported observation on this explosion is that everything within seemed gutted, which is a different pattern from many blow-ups.

BUILT ON CREOSOTED PILE

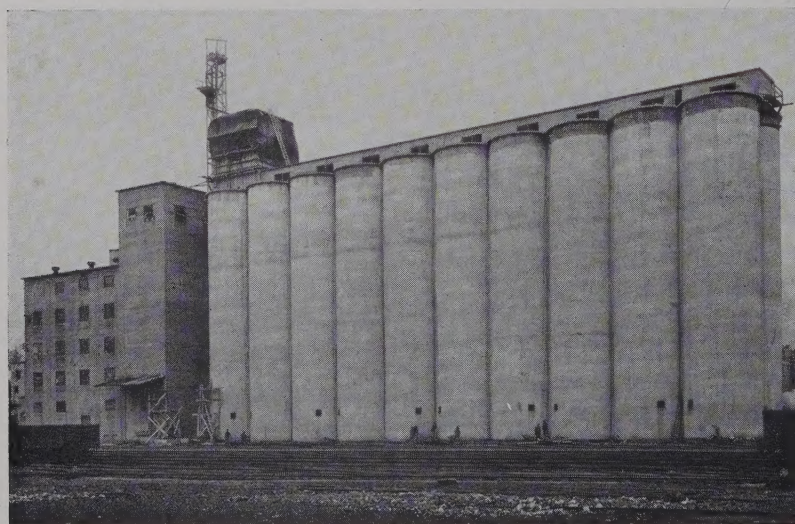
THE latest addition to grain storage capacity in the Kansas City area is the wheat elevator recently erected by the Continental Baking Company for its new whole wheat flour mill in the Rosedale industrial district. Approximately 30,000 lineal feet of creosoted wood piles were driven for the support of the grain bins, head house and tunnel.

The mill building was erected in Rosedale some years ago and of late has been equipped with machinery to carry out the manufacture of a new type of flour. The 500,000 bushel ele-

vator consists of 20 reinforced concrete tanks, 96 feet high and 20½ feet in diameter, resting on a 24 inch concrete mat. The bottom of the mat is about 6 feet below grade. The conveyor tunnel extends about 7 feet below the mat. The head house has a height of 30 feet above the bin tops.

The creosoted wood piles under the elevator were driven through yellow clay to bed rock. This required the use of 1,046 piles 25 feet long under the bins and 152 piles 20 feet long under the tunnel. Natural water level is located considerably below the level of —12, the pile cut-off under the tunnel. The foundation piles are Southern pine pressure treated with a final retention of 12 pounds of creosote per cubic foot of wood.

This kind of preservative treatment is of value primarily for kinds of wood not naturally resistant to decay. Treatment of such non-resistant woods makes available lumber and timber not economically usable untreated. For this particular usage, the creosoting treatment gives indefinitely long life to the piling, results in lower plant cost maintenance and repair, and satisfactorily takes the place of more costly concrete piling. Creosoted piling is truly regarded as permanent for underground conditions. Even the future lowering of the water table will not affect it. Certain types of soil have relatively little supporting capacity, thus requiring piling regardless of the presence of water.



ADVERTISING departments of the nation's business enterprises have a vital role to play in the war effort by building worker morale, disseminating information to the public, and preserving contacts with normal markets," authority Neil C. Hurley, Jr., declares.

"If every worker understands the desperate need and the ultimate military use for the material he is producing, more of every vital product will be turned out—and that is advertising's job. The stimulation of morale, the dramatic presentation of quotas and their actual progress at each plant call for a sense of showmanship," he pointed out.

THE greatly increased rate of elevator and mill fire losses and the mysterious causes thereof leads the Mill Mutual Fire Prevention Bureau to warn that most recent conflagrations are the "inside" work of small-fry German sympathizers rather than any organized sabotage.

"They are not trained as saboteurs. They have no chance of destroying our large and important war materials plants. So what could be more likely than that they would pick out an isolated, unwatched and highly combustible grain storage plant—particularly in the face of the widely ad-

vertised shortage of grain storage space being one of our most difficult problems.

"Not one of these plants that have burned was protected by a night watchman, by floodlights, or even by a watch dog. It was perfectly possible to get into one of them without probability of detection. The arson investigators are working up blind alleys. There are none of the usual motives and no clues to trace.

"Much valuable time has been lost and property destroyed, but no time should now be lost in protection of every grain handling and processing plant against the saboteur. Not all of the following suggestions will be applicable to all plants, but some of them fit every plant, and they are offered for the serious consideration of every plant owner:

1. Fence the property.
2. Provide alarms against intruders.
3. Employ a watchman.
4. Watch-dogs can be extremely worth while.
5. Floodlight the premises. This is important.
6. Post signs warning outsiders "No Admittance, etc."
7. Enlist aid of employees in spotting outsiders.
8. Make all employees fire-conscious.
9. Keep first aid fire-fighting equipment in first rate condition.
10. Organize, train and practice fire-fighting brigades."

A Study of Our Industry

WHILE many of the subdivisions of the grain handling and processing industry are not placed under the Department of Commerce's microscope in its 16th Census of Wholesale Trade, yet enough facts and figures are revealed to make some pretty comprehensive deductions. Although all of the figures may not appear entirely in line with your own notions of some factors shown, yet the great number of firms not reporting might easily overbalance same to produce the results set forth.

Striking comparisons come to light all the way across the columns of figures under each classification, and careful scrutiny indicates where

future savings are perhaps possible and practicable. Unquestionably the physical handling adds up to the lion's share of the expenses involved in functioning—except among the flour mills—and some additional observations await reading vertically as well as horizontally.

Not only is a better comprehension of the breadth and scope of the industry possible—particularly if the small number reporting is kept in mind—but much of the character of various operations might readily become a yardstick for the analytical Super. Furthermore, ours is an industry of which we may be mighty proud in every respect.

KIND OF BUSINESS BUSINESS-SIZE GROUP	Number of estab- lish- ments	Sales (add 000)	OPERATING EXPENSES (including pay roll)		Active proprietors and part- time employees* (full-time roll)	Total pay roll* (add 000)	ESTABLISHMENTS REPORTING ANALYSIS OF EXPENSES† (Only Establishments With Sales of \$100,000 or More are Included in This Table)										Active proprietors of unincorporated businesses
			Amount (add 000)	Per cent of sales			Num- ber	Sales (add 000)	Total	Admin- istrative	Selling	Deliv- ery	Ware- house	Occu- pancy	Other		
GRAINS	373	452,464	24,120	5.3	197	4,785	8,296	77	146,352	5.3	1.1	.3	.2	2.0	.8	.9	36
\$2,000,000 and over...	53	337,900	15,875	4.7	...	2,365	4,907	10	115,074	4.5	.8	.2	2.1	(1)	.5	.9	..
\$1,000,000-\$1,999,999	36	51,679	2,247	4.3	3	518	952	10	13,002	6.4	1.9	.8	.5	1.1	1.5	.6	2
\$500,000-\$999,999	37	27,101	1,993	7.4	5	495	767	9	6,695	7.1	2.3	.9	.4	1.1	1.5	.9	1
\$300,000-\$499,999	37	14,441	1,421	9.8	18	391	516	14	5,295	9.5	2.1	1.1	1.7	2.1	1.8	.7	10
\$200,000-\$299,999	26	6,378	805	12.6	8	270	340	12	2,931	12.1	2.7	1.3	1.4	3.1	2.7	.9	6
\$100,000-\$199,999	61	9,288	1,033	11.1	47	367	452	22	3,355	11.8	3.2	1.3	2.5	1.5	2.7	.6	17
\$50,000-\$99,999	56	3,872	500	12.9	49	217	239	..	..	..	..	..	..	..	..	..	..
Under \$50,000	67	1,805	246	13.6	67	162	123	..	..	..	..	..	..	..	..	..	..
Less than one-tenth of one per cent																	
FEED	762	126,788	13,926	11.0	625	5,027	6,477	164	\$63,007	11.1	3.2	1.8	1.9	1.6	1.8	.8	97
\$2,000,000 and over...	8	22,365	1,453	6.5	...	494	763	..	\$1,000,000 and over	..	..	..	..	..	..	..	..
\$1,000,000-\$1,999,999	11	14,098	1,484	10.5	5	349	734	11	19,331	8.4	3.2	1.3	1.2	1.0	1.1	.6	5
\$500,000-\$999,999	37	24,549	2,512	10.2	27	845	1,153	26	16,927	10.8	3.1	2.1	1.7	1.5	1.6	.8	21
\$300,000-\$499,999	40	15,171	1,970	13.0	20	635	892	27	10,186	12.7	3.2	2.0	2.2	2.1	2.2	1.0	11
\$200,000-\$299,999	57	13,720	1,635	11.9	41	566	745	31	7,453	12.5	2.9	2.1	2.2	2.1	2.4	.8	20
\$100,000-\$199,999	128	16,836	2,168	12.9	88	838	966	69	9,110	14.3	3.6	2.1	2.9	2.1	2.7	.9	40
\$50,000-\$99,999	176	12,517	1,576	12.6	145	710	743	..	..	..	..	..	..	..	..	..	..
\$10,000-\$49,999	245	7,293	1,083	14.8	257	560	462	..	..	..	..	..	..	..	..	..	..
Under \$10,000	40	239	45	18.8	42	30	19	..	..	..	..	..	..	..	..	..	..
FLOUR	315	44,385	5,140	11.6	216	1,408	2,357	87	24,880	11.6	3.6	2.7	2.4	.8	1.3	.8	45
\$500,000 and over...	10	9,133	1,003	11.0	7	144	413	..	\$300,000 and over	..	..	..	..	..	..	..	..
\$300,000-\$499,999	33	12,497	1,301	10.4	14	312	577	32	14,831	10.9	3.3	2.6	2.3	.7	1.3	.7	15
\$200,000-\$299,999	30	7,355	837	11.4	14	235	371	21	5,220	11.7	3.6	2.3	2.7	1.0	.9	1.2	12
\$100,000-\$199,999	54	7,625	1,021	13.4	26	315	573	34	4,829	13.5	4.6	3.2	2.6	1.0	1.4	.7	18
\$50,000-\$99,999	72	4,944	610	12.3	49	236	273	..	..	..	..	..	..	..	..	..	..
\$10,000-\$49,999	100	2,745	355	12.9	93	159	145	..	..	..	..	..	..	..	..	..	..
Under \$10,000	16	86	13	15.1	13	7	5	..	..	..	..	..	..	..	..	..	..
BREAKFAST CEREALS	32	21,984	9,644	43.9	7	827	1,362	..	..	..	..	..	..	..	..	..	..

*Employees and pay roll include paid executives of corporations but not the number and compensation of proprietors of unincorporated businesses.

†Operating expenses include no compensation for active proprietors of unincorporated businesses.

ELECTRICAL HELPS IN THE ELEVATOR

By Jerry Lacy, Superintendent, Westcentral Co-op. Grain Company,
Omaha, Before Superintendents' Meeting

WHENEVER it becomes necessary to call in an electrician for repairs, it will save you money to have him take care of or make inspection of such other motors or apparatus as has been troubling you.

Labor is charged from the time a man leaves the shop, so any other minor repairs or inspection he may make while on the job will save you money and help "keep things rolling." Also, be free to ask him any questions about your apparatus or motors; he may give you valuable suggestions which cost you nothing.

Dirt Causes 90% of Trouble



NINETY per cent of most motor failures come from bearing trouble, dirt, bad drives, and overloaded conditions. The other 10% comes from causes unavoidable. Consequently it is well to check motors

from time to time for these faults.

Many sleeves and especially ball-bearings in motors, are knocked out by large, bulky, splices in the belt. Every time the splice hits the pulley it is like a hammer blow on the bearing,—and finally causes its failure.

Do not fill the oil wells so that the oil runs out of the housing and into the windings, for this will cause the windings to deteriorate.

If the belt from the motor to its drive has to be kept tight as a fiddle string, the drive is improper, either the belt is too small for the load, or the center distances do not allow proper belt contact with the pulleys. The net result is bearing trouble.

Always clean the brass ferrules or blades of fuses before you insert them into the fuse blocks, as there may be a film of oxide on them which causes premature heating and blowouts.

Keep Links, Fuses on Hand

ALSO, when replacing fuse links, be sure to see that the binding posts of the links are clean and free from oxide, caused by the gases of blown links. Be sure to have a supply of both links and fuses on hand, as they will be difficult to get later on.

When starting a motor using a hand type starter, always throw it quickly on the starting side,—then wait until the motor comes up to speed before you throw it on the running side. Throwing it in slowly or jogging it two or three times blisters the contacts and causes most of the starter

failures,—and sometimes causes the motor to burn out a phase winding.

Your plant can save considerable money and unnecessary shut-downs through periodical inspections of all motors, starters, and belt drives. Worn bearings, faulty and loose connections, and bad starter contacts causes unnecessary shut-downs and loss of production. A stitch in time saves nine.

Better Care Avoids This

DUE to the vastness of the Defense Program, it will be extremely hard to obtain magnet wire necessary for motor rewinding. Instructions have now been given out to motor rewinding shops to cut out coils or patch windings wherever possible, so that motors may be kept in operation without rewinding and thereby conserve on copper.

It is impossible to obtain any magnet wire without a priority rating. The lowest rating possible to obtain this wire now is an A-10. However, there is talk about the Government confiscating all magnet wire and allowing its use only on an A-3 rating. (The situation is still tighter now.)

As things become more serious, it will be necessary to install rental motors until wire is obtained for yours. In view of this situation it is doubly important to inspect your equipment and keep it in good condition. It is also recommended that any spare motors you may have on hand which are burnt out, should be re-wound now and kept on hand for future service.

The heavy duty all rubber extension cord which all elevators and mills use is practically off the market and almost impossible to obtain. For this reason, you should caution your crew to be very careful of this item, for with proper care they will do double duty.

All in all, the watchword of the day is "keep them running," by running down the trouble before it happens.

BUILD UP TO FIRE WEEK

OCTOBER 4th to 10th has been designated as Fire Prevention Week in Canada and the U. S. Your help is enlisted in promoting observance thereof. . . . Calling upon the nation on this occasion as part of the war effort, President Roosevelt charged the Office of Civilian Defense, which is responsible for civil protection in wartime, to assume leadership in the observance.

Fire is always serious, but now, as the President pointed out in his proclamation, every loss of life, every interference with production, every

loss of critical materials delays victory. Fire Prevention Week affords an opportunity to impress all the people with the present urgency of protecting our resources against destruction by fire. . . . Fire is an active ally of the Axis. Every fire is a reversal for the United Nations. There can be no insurance for the Nation against the losses of time and irreplaceable materials resulting from fire.

The U. S. material losses, in 1941, were estimated to be \$303,895,000. This was an increase of \$17,493,633 over the losses for the previous year. Already in 1942, we are burning up more factories, homes, and needed raw materials than we did last year. For the first five months in 1942, our losses exceeded those for the same period a year ago by \$9,072,000. Fire kills ten thousand people in the U. S. every year, many of them important workmen in our industries. . . . The loss by accidental fire of the Normandie in New York and the huge stockpile of rubber at Fall River, Mass., was as much help to Hitler as though he had set them off with his own incendiary bombs. These and last year's high conflagrations on the Brooklyn waterfront are sensational. But there are many losses less obvious.

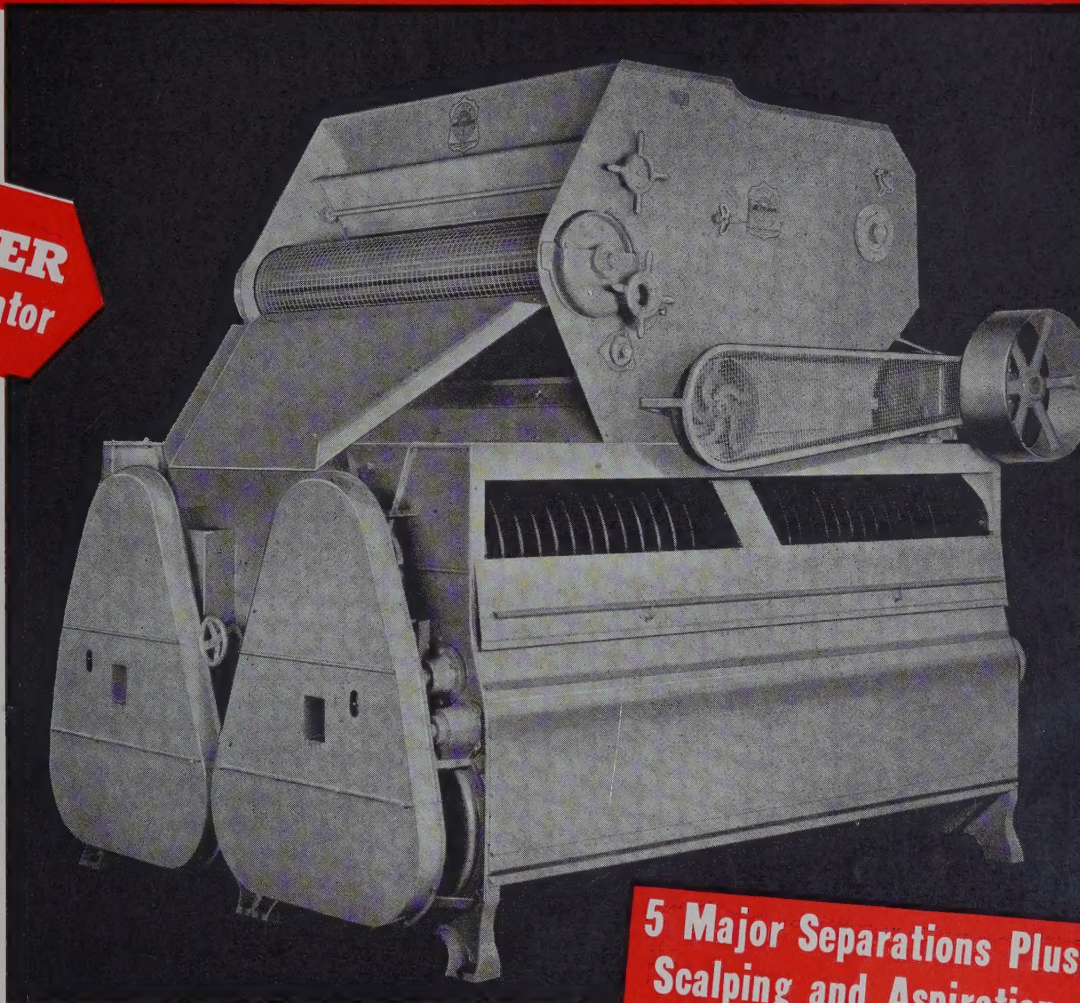
The elimination of our fire losses cannot be accomplished in a single week, of course. But Fire Prevention Week affords an opportunity to impress upon all of us the necessity for keeping our homes and places of employment safe from fire. . . . One of the objectives of this annual observance is to teach us how to eliminate the causes of fire. Carelessness and negligence are at the bottom of most of its causes, and it is estimated that more than one-fourth of all fires are preventable, with a large share of the rest being partly preventable. . . . An equally important objective is to teach us how we can defend ourselves against the fires that do start. Experience demonstrates that not all fires can be prevented, even with far greater vigilance than the nation practices today.

Provision of protective equipment is complicated at present by the fact that many of the materials used in the manufacture of fire-fighting equipment are needed by the Army and Navy. It is essential, therefore, that we take better care than ever before of existing equipment and learn how to use it more effectively. We must not relax for a moment our vigilance against fires, our care of the equipment we now have, or our efforts to learn to use that existing equipment at new high levels of efficiency.

SOGES members have available to them a complete set of campaign materials, posters, pamphlets, etc., to a good fire prevention session with the crew for the writing to National Fire Protection Association, 60 Battery-march Street, Boston, Mass.

Here Is GIANT Cleaning Capacity

2564 CARTER Disc Cylinder Separator



5 Major Separations Plus
Scalping and Aspiration
In One Operation

Unusual Thoroughness and High Capacity Plus Compactness and Low Operating Cost!

When grain must be cleaned thoroughly and efficiently at high speed and at low cost, the 2564 Carter Disc Cylinder Separator stands without equal. It provides big capacity without sacrificing economy. It cleans hundreds of extra bushels at extremely small cost. Operating quietly and without vibration, the 2564 does a remarkably exacting job on wheat, barley, durum, rye and oats. In one operation at high capacity it performs five major separations in addition to scalping and aspiration. It cleans barley thoroughly with amazingly small

shrinkage; separates spring wheat from durum. On spring wheat, users report a capacity of 1,200 bushels per hour, ranging up to 1,400 bushels per hour under favorable conditions. Operating features which have become popular with terminal elevator men everywhere include exacting control of air liftings and positive, mechanical control of grain line and flow. Sturdily built for long, continuous economical service, the 2564 is all enclosed, dustless, a model for compactness, low power and capacity. Occupies less than 9 square feet on the floor. Get details on this big value machine now.

CARTER-CARTER COMPANY

670 19th Avenue N. E.

Minneapolis, Minn.

STATIC ELIMINATOR

HAVE the boys heard of the new wire-brush static eliminator for belts? To me the eliminator seems to offer a practical solution for the grounding of static electricity and something of an improvement over what I have seen in the past.—C. J. Alger, Corn Products Refining Company, Argo, Ill.

SUPERIOR EXPLOSION REPORT

THE Superior (Wis.) explosion on January 10th is now reported by the NFPA to have ruptured the sprinkler system beyond use. "Fire followed by three explosions started at the top of a conveyor leg from friction on the belt. Loss: \$1,350,000."

NEW INTER-COMMUNICATING PHONE

Working short handed as many grain handling and processing plants are just now, and with the prospect of losing still further members of the crew, particular interest will be manifested in an inter-communication system known as the "Talk-A-Phone" just being introduced by the Seedburo Equipment Company of Chicago.

Low in price, easy to install, and economical to operate, the Talk-A-Phone permits two-way conversations with any part of the plant and the office. Thus information wanted from any spot is instantly available.

Not only can the master station talk to any sub-station—it can talk to all at one time if desired. Persons at sub-stations can answer without leaving their work from as far away as fifty feet. Conversely each sub-station can originate a call to the master station.

Costing less than 15 cents a month to operate, the only possible replacement parts are the tubes, and these last as long as radio tubes. The system can be operated day and night continuously without affecting the amplifier. No priority is needed, so immediate shipment is assured.

NEW DUST-EXPLOSION CONTROL MEASURES APPROVED BY

N. F. P. A.

BECAUSE of the occurrence of several destructive dust explosions during the past year, additional safety measures applying to grain elevators were recommended in a report which was approved by the National Fire Protection Association at its 46th annual meeting which was held in Atlantic City, N. J.

The report, which was submitted by the Committee on Dust Explosion Hazards, of which David J. Price, of the U. S. Department of Agriculture is chairman, covers the application of suction and venting for the control of dust in grain elevators and storage bins, and also the prevention of dust explosions in country grain elevators.

At the conclusion of the meeting, Dr. Price was elected president of the N. F. P. A. for the ensuing year.

FIRE, EXPLOSION LOSS UP 250%

IN his annual Dust Explosion Hazards Committee report presented before the National Fire Protection Association, Chairman D. J. Price cited the increase of 250% in the number of explosions and fires involving valuable agricultural war materials during the first quarter of this year as compared with a year ago.

Accomplishments in World War I

IN the development of a national plan for the protection of grain, foods, and other agricultural products from losses from dust explosions and fires, it is of interest to observe the experiences of the last world war in dealing with a similar situation.

In World War I the Bureau of Chemistry, USDA, cooperated with the U. S. Grain Corporation, U. S. Food Administration, National Board of Fire Underwriters, and other related fire prevention agencies in a National Grain Dust Explosion and Fire Prevention Campaign. That campaign covered the protection of government war stocks in storage and processing plants, such as grain elevators, flour

mills, feed mills, and similar types of plants.

From October 1, 1917, to July 1, 1919—a period of 21 months—the average value of the weekly grain holdings at all storage points was approximately \$100,000,000. Taking these holdings in the various markets at the average rate of insurance as applied to most storage plants for that period—if the Government had paid insurance instead of carrying its own risk—the premiums for that period would have amounted to \$1,961,500. That insurance cost would have been around \$3,000,000 up to June, 1920, when the explosion and fire prevention campaign was terminated.

It is significant to note that in this special war emergency campaign in World War I, the U. S. Grain Corporation did not have a single loss from fire. This remarkable record emphasizes dramatically the need for similar protection in the present war emergency, when it is of such vital importance to save these valuable war materials.

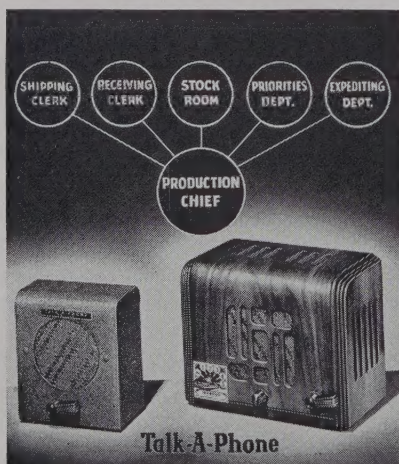
Army Bread Lost

BREAD rations for an army of approximately 700,000 men for an entire year were lost when the grain dust explosion and fire destroyed valuable storage and shipping facilities at the head of the lakes earlier this year, according to Dr. Price, USDA expert.

LOOK IT UP

"Dust, The Destroyer" is the caption of an interesting article appearing on pages 88-91 in the September Popular Mechanics. Methods employed by the Underwriters' Laboratories in making test "bombs" with dust are described. Many elevator close-ups are pictured. Directed primarily at grain handling and processing plants, some worth while pointers can be picked up for the reading.

Defense Savings Bonds can be registered in the name of children as well as adults.



HOW TO SAVE TIME AND FOOTSTEPS TALK-A-PHONE INTER-COMMUNICATION SYSTEM

Speed up your work and save time and energy with a TALK-A-PHONE. You flip a key and talk instantly with any individual in your plant. Get immediate action on your ideas, orders and questions. Person at sub-station can answer without leaving his work from as far away as 50 feet.

The TALK-A-PHONE costs less than 15c a month to operate. It can easily be installed by anyone. Works on A.C. or D.C. Lowest price inter-communication system on the market. Immediate shipment. No priority needed.

SEEDBURO EQUIPMENT CO.
626 Brooks Bldg. CHICAGO, ILL.

SICK WHEAT SHOWING UP

FREQUENT rains preceding and continuing through harvest season in the hard and soft winter wheat areas resulted in a high moisture crop. Combines scurrying through fields just ahead of fresh down-pours gave the berries no opportunity to cure in the head. Failure to turn in the early periods of storage resulted in "sick" wheat.

"Sick wheat is suffocated wheat," states O. F. Phillips, chairman of the Federal Board of Review. "The germ of the wheat berry is a living organism. It breathes. When suffocated for lack of air, inter-molecular respiration takes place. This breaks down the starch cells and the wheat starts to deteriorate. The germ turns color. It becomes gray, or reddish brown, or black. The bran coat is soon affected and the berry takes on a dead, lifeless, sometimes skin-burned appearance. If sick wheat is left to natural processes it becomes heat damaged. Eventually the whole berry will become black and charred."

Further, a discolored germ and a sour or musty odor characterize musty wheat, which as all know throws the lot into sample grade. Nor can sick wheat be mixed with good wheat for human consumption under the Food & Drug Administration. Chicken feed is the single outlet for sick wheat, and then only when mixed with a proper balance of good grains and concentrates.

If aerated immediately upon discovery of this sick condition, further damage may be arrested. Obviously many factors determine the safety point for storage of this grain, but generally it is agreed that 12.5% moisture in hard or soft winter wheat and 13.5% in hard spring is usually the top limit. Frequently it must be less.

WHEAT TO LIVESTOCK

A concerted drive is being made by the USDA, as well as the Canadian Government, to stimulate the feeding of wheat to livestock. Agricultural Secretary Wickard says:

"We are using up our corn supply faster than we are producing more corn. This year we are using about 150,000,000 bushels more than we raised last year. Next year, unless we feed more wheat than usual, we will use over 200,000,000 bushels more corn than we are raising this year. . . . That is the outlook now, and it takes into account the splendid 1942 yield indicated by the August crop report. From the way things looked the first of this month, we will produce about 75,000,000 bushels more corn this year than we did last year. But even so, the expected increase in corn production is not keeping pace with the much larger increase in the number of meat and dairy animals that must be fed."

WHEAT IN PARLOR

A HOTEL is being used for wheat storage in Vega, Texas; a boarding school in Hemphill county. Looking unhappily at the biggest and best wheat crop in years a western Kansas farmer moved the family belongings from his living room and filled it with the luscious grain. Garages, vacant store buildings, yes, everything except jails and court houses are being used to supplement huge mountains of Southwestern wheat piled out on the ground with no protection against the ravages of the weather, insects, et al. Yields are exceeding estimates.

\$7,000 IN TARPAULANS

There is one pile of wheat on the ground at a single location in the Panhandle of Texas containing 500,000 bushels of wheat. It is covered with \$7,000 worth of tarpaulins to protect it while permanent storage is being built for it.

Outside of this lot, practically all of the wheat which was dumped on the ground at harvest time has been moved to storage of some kind.—H. C. Adams, Secretary, Panhandle Grain & Feed Dealers Association, Amarillo.

MILLIONS ON GROUND

Some 18,417,000 bushels of wheat is piled on the ground in Kansas, of which some 91% is in the western third of the state, says a BAE report.

Considerable effort has been made to provide additional storage space for the second largest crop on record in western Kansas.

"TIN CAN" VILLAGE

Barring the unforeseen, we will also have one of the largest corn crops in history. We are going to compete with Iowa on yields this year.

We have some spots where there are so many "tin cans" lined up that they have streets named and numbered.—Phil Runion, Secretary, Nebraska Grain Dealers Association, Lincoln, Neb.

WHEAT GRIND STILL DOWN

Only 37,841,715 bushels of wheat were ground by 1,091 flour mills during June, compared with 38,818,781 bushels ground by 1,104 mills a year ago. These mills accounted for 94.5% of the total wheat-flour production, reports the USDC.

CORN GRIND OFF TRIFLE

Only 9,717,326 bushels of corn were ground by the eleven refiners of starches, syrups, sugars and other derivatives of corn for domestic consumption during July. This figure, however, greatly exceeds peace-time operations, and is only off 50,000 bushels from last month's figures.

ODT ORDER ON LOADING CARS

ODT Order No. 18 brings about a more efficient utilization of freight cars and says in Section 500:24—

"Any car subject to the provisions of this subpart shall be deemed loaded to required capacity: (A) If such car is loaded with non-bulk freight consisting of any one or more of the following commodities,—grain products, grain by-products, cereal food preparations, vegetable oil meal, all in containers, and vegetable oil cake—to a minimum weight of 60,000 pounds or to full visible capacity."

EXEMPTION ON SHIPMENTS

Bulk grain, soybeans, flaxseed and malt destined for offshort shipment to elevators in any U. S. port where the carrier has ascertained that adequate storage or handling facilities at the elevator are available have been exempted from the application of ODT Order No. 16.

CARLOADINGS STILL AHEAD

Cars loaded with grain and grain products to date this year still hold the lead over previous years, despite the holding back of the new crop due to shortage of storage space. Loadings in weeks ending as shown, were:

	1942	1941	1940
July 25	46,333	55,281	46,024
Aug. 1	43,618	46,140	40,690
Aug. 8	42,126	45,888	41,386
Aug. 15	44,684	44,375	43,344

For the first 33 weeks of the calendar year 1,303,941 cars were loaded in 1942, 1,269,956 in 1941, and 1,154,187 in 1940.

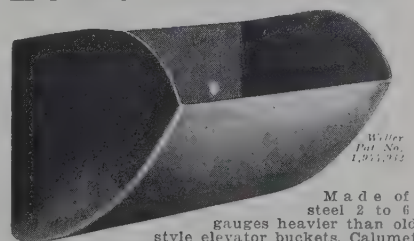
EXPORTS OF GRAIN

Cars of grain for export unloaded in July this year at Atlantic, Gulf and Pacific ports totaled 2,319 cars compared with 6,273 in the same month last year.

SEATTLE TO BUILD

AN 800,000 bushel elevator is to be completed by the Seattle Port Commission as part of a transaction included in lease of the East Waterway Dock and appurtenances on Harbor Island. The Commission now owns the 1,500,000 bushel Hanford Street terminal.

LONG LIFE MAKES TRUE ECONOMY



Made of steel 2 to 6 gauges heavier than old style elevator buckets. Calumet Cups wear much longer. Write for our Proposal Blank—Form G 8.

CALUMET CUPS
B. I. WELLER CO.
327 So. LaSalle St.
Chicago, Ill.



DANGEROUS ONLY WHEN **CORNERED**

Given room to roam, a rattlesnake is a fairly decent citizen.
Corner him . . . and it is just too, too bad!

A dust explosion, too, violently objects to being cornered.
It is the nature of the beast to *expand* with cyclonic fury.

Robertson Safety Ventilators provide *room* for expansion
. . . an EXIT through which dust explosions rush *harm-*
lessly out into the *open*.

Robertson Safety Ventilators mounted on your elevator
leg, also, provide a dependable safeguard against *primary*
explosions by *continually* venting fine dust with gravity
action.

Play safe with Robertson Safety Ventilators. Write today
for complete particulars.

H. H. ROBERTSON CO.

Farmers Bank Bldg.

Pittsburgh, Pa.

KANSAS' SECOND BIGGEST

According to official estimates released August 10th, the Kansas wheat crop is 196,063,000 bushels, the second largest in the history of the state. Ford county was the banner producer, being credited with 6,682,000 bushels. An unusually large portion of the state's production was grown west of the 100th meridian this year.—Forrest Moyer, Secretary, Kansas Grain, Feed & Seed Dealers Association, Dodge City, Kan.

HUMIDITY HIGH

Humidity something terrible in Maryland this summer. Rain, rain, and then more rain until we are so sick of it we could go drown ourselves. Wheat is coming in wet and of poor quality, in fact we are drying over 80% of it. Farmers taking beating on crop this season. Don't see why they raise wheat in Maryland when they so often lose their shirt on it.

Labor is something to get. Have been scouting about for another man to take the place of one who left us some time ago. Mr. Keller at the Western Maryland is in same boat. Some elevator men who have been on the job a long time are leaving now and are not realizing that defense jobs will play out some day and they will really be out.—Frank A. Peterson, Norris Grain Co., Baltimore.

New Style Addition

BUTLER-WELSH GRAIN COMPANY is adding a 261x80x60 foot 550,000 bushel lean-to style annex to its Rock Island house in Council Bluffs. Filling will be done through a four-foot opening in the top. Unloading will be over a conveyor belt at the house side,—vacuum being used where needed.

Rushing Construction

OCTOBER 1st is now the completion date set for the new Seattle Port Commission elevator now under construction. Kerr, Gifford & Company will operate the 800,000 bushel plant. . . . Continental Grain Company's 500,000 bushel plant at Pasco (Wash.) is now being completed to receive new crop grain.

NEW ELEVATOR VOTED

A 500,000 bushel terminal has been voted for The Dalles, Ore. The Port Commission holds contract for an 18 year lease from the Continental Grain Company. Need for the facilities to handle the 1942 wheat crop has spurred action.

COMPLETES STORAGE ON COAST

The Port of Astoria (Ore.) has completed storage for 450,000 bushels, and workmen are currently adding storage facilities to the plant on Pier 3.

New Soy Plant

The new quarter-million bushel elevator for the Galesburg (Ill.) Soy Products Company is about completed.

ELEVATOR BURNS

One of our members, George W. McCann, had a bit of tough luck this month. His elevator burned to the ground on a Sunday morning. Very little grain in it and I understand it was covered by insurance. The fire started in an ice house near by and spread to the elevator. Both are a total loss.—John Goetzinger, Rosenbaum Brothers, Secretary Omaha Chapter SOGES.

Fremont Elevator Fire

Fire destroyed \$100,000 in wheat and the \$120,000 Updike Elevator at Fremont, Neb., recently. Rebuilding has commenced.

SOURCE OF FIRES

Twenty-one percent of all industrial fire losses in one recently selected month originated from electrical causes, states Factory Mutual Record.

Fires in electrical equipment can be prevented by careful inspection, attention to oiling and cleaning, authorities contend.

SOGES member Harry McKay, Westinghouse Electric & Mfg. Company, 20 North Wacker Drive, Chicago, has available to readers of "GRAIN" a valuable Maintenance Check Chart which will be worth following and is available for only the asking.

FIRE DRILLS

There have been enough recorded fires in which the complete absence of loss of life has been directly traced to the prompt and well executed evacuation of the plant as practiced during fire drills, to prove the undoubted value of a well trained and well disciplined unit in time of fire.

PUBLISHER DIES

John H. Adams, Publisher and Editor of *The National Grain Journal*, died August 8th at his home in Minneapolis. Burial took place in Cedar Rapids, August 12th. Mr. Adams was always impressed with the progressive work of the Superintendents' Society and most generous with the space given their activities and accomplishments.

180,000 Sq. Feet of Surface renewed with GUNITE and SURFACITE!



All the cracks in this fine-looking elevator were repaired by forcing tough-bonding Gunite into them at a high pressure.

Then the whole structure was thoroughly waterproofed with an extra thick coating of Surfacite.

For a better than new job, write

JOHN D. BOLTON
20 N. Wacker Drive - - - Chicago

**NO VACATION FOR
MR. WEEVIL!**



**and the Forty-hour Week isn't
on his schedule either!**

**He Likes Nothing Better than to Collect Another High
Tax On Your Hard-Earned Profits.**

You can spoil his sport with LARVACIDE, killing the adult stage, and also the egg life and larvae.

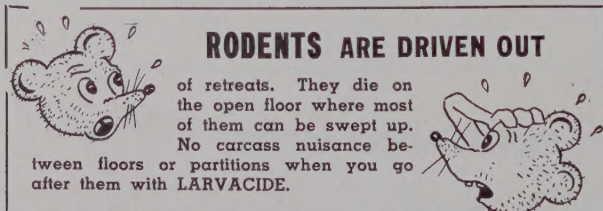
WHEN GRAIN IS TO BE HELD IN STORAGE

The experience of many users shows that, following the inexpensive LARVACIDE treatment, grain may be held for six months or longer without expectation of weevil damage. Of course such grain must have proper moisture content for storage (say 13% to 13½%) and must not be subject to reinfestation from elsewhere in the elevator.

The cost is low—\$1.50 to \$1.70 per thousand bushels in closed concrete bins, this figure being based on dosage recommended by the U. S. Department of Agriculture.

CONTROL MOTH TOO

By sprinkling or spraying the surface of the standing grain with LARVACIDE.



RODENTS ARE DRIVEN OUT

of retreats. They die on the open floor where most of them can be swept up. No carcass nuisance between floors or partitions when you go after them with LARVACIDE.

The way to Better and More Economical Control of Granary Insects and Rodents is made clear in LARVACIDE Folders—FREE for the asking. Write for them TODAY!

Larvacide

is a tear gas fumigant, shipped in liquid form in cylinders 25-180 lbs. and 1 lb. bottles, especially convenient for small jobs and rodent work. Each bottle is put up in safety can, 6 or 12 to wooden case. Stocked in major cities.

INNIS, SPEIDEN & COMPANY

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Plan
**FUTURE MATERIAL
HANDLING REQUIREMENTS**
with The "HAMMOND"

Screw-Lift and Screw-Veyor

This ultra-modern means of conveying offers savings in space plus high efficiency, dust and moisture tightness. Handles wet or dry materials on a horizontal, inclined or vertical plane, quietly and at higher speeds. Its tubular construction enables precision operation, great accessibility, avoidance of material breakage, and many other advantages. The Screw-Veyor conveys horizontally or on an incline. The Screw-Lift conveys vertically to practical heights of 70 feet or more.

WRITE NOW for detailed information relative to this unique, cost-saving and versatile conveying system. Ask for Analysis Form M-500-2.

U. S. Pat. No. 2260811-
2260812-2279201.

Other U. S. and
Foreign Pats. Pend.

Screw Conveyor Corporation

707 HOFFMAN ST.

HAMMOND, IND.

SCREW CONVEYORS



ELEVATOR BUCKETS

TRADE MARK REG.

U.S. PAT. OFFICE

Want

HELP?

COMPETENT, WILLING
WORKERS

EXPERIENCED GRAIN
PLANT EMPLOYEES . .

Wire, Write or Phone

Adams employment
AGENCY

Board of Trade

Chicago, Ill.

WABash 3344-45

BUSINESS CONVENTIONS OKAY

According to reports, government authorities are giving the "green light" to business conventions, discouraging only pleasure-type confabs.

HAPPY BIRTHDAY!

Happy birthday greetings during August go to John H. Parker, Director of the Kansas Wheat Improvement Association (among other titles), Manhattan, on August 13th, and to George S. O. Smith, Superintendent of Valier & Spies, St. Louis, on August 27th.

Next month J. M. Chilton, Manager of the Grain Department of Archer-Daniels-Midland Company, Minneapolis, will have candles on his birthday cake on September 4th; Stan Watson, S. Howes Company, Silver Creek, N. Y., on September 7th; Victor H. Reid, Hart-Carter Company, Minneapolis, on September 27th, and W. A. Deeds, Linseed Oil Mill, Sherwin-Williams Company, Cleveland, on September 27th. . . . Happy birthday to you all!

[Do we have your birthday?]

BLODGETT TO ARMY

WEEVIL-CIDE'S Frank E. Blodgett, Kansas City, joins the Army on August 10th. Considering his background, Frank ought to be able to exterminate all the little Axis pests single handed. Good luck to you, Frank!

GIBSON FRANKS TO NAVY

Gibson Franks, experienced in all phases of grain handling and processing in the Chicago market, joined the Navy as an Associate Inspector of Naval Materials recently. Formerly he was associated with various malt, soybean and grain plants to gain a complete education in all phases of handling and processing.

McWilliams Succeeds Johnson

MR. A. C. Johnson, who was formerly our superintendent, has been succeeded by Mr. C. P. McWilliams.—M. L. Gear, Vice President & Treasurer, The Kansas Elevator Co., Topeka.

STARK SUCCEEDS WHITNEY, LAND

HUGH STARK succeeds Giles E. Whitney as Superintendent of the Omaha Elevator Company's Council Bluffs plant, according to John T. Goetzinger, Rosenbaum Brothers, Omaha Chapter SOGES Secretary.

"Giles was known among the elevator men as a real fellow, and we will all miss him. He took over the plant on June 1st when Bob Land retired, and didn't complete the first week."

OMAHA TO OPEN SEPT. 15

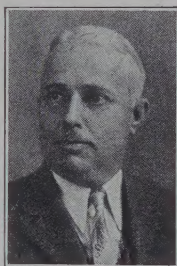
Our Chapter will start its meetings again on September 15th. We hope to gain two or three new members.—John Goetzinger, Rosenbaum Brothers, Chapter Secretary.

GETTING TOGETHER DOES GOOD

I THINK getting together occasionally on an outing such as Kansas City recently held does the members in the Society a great deal of good. I only wish they could do this more often. Am sorry to say I happened to be on my vacation at the time our chapter went to the Lake of the Ozarks, but have talked to most of the members and all that attended seemed to have had a splendid time.—Jim Kier, Standard Milling Company, Kansas City.

BREAKS INTO PRINT

William H. MacDonald, William H. Gassler, and Rosenbaum Brothers "Calumet Elevator" in South Chicago really broke into print in a big way in the Chicago Tribune's special Sunday "Metropolitan Section" recently. Pictures along with a vivid column length article told John Q. Public of the importance of grain handling for food and for war.



Kept It a Secret

WORD has just leaked out that Miss Rachel Wilber, daughter of Mr. and Mrs. Harold C. Wilber, Decatur, Ill., was married to Leland England, Jr., recently. Mr. Wilber is Super of the A. E. Staley Mfg. Co.'s elevator, and a SOGES Director.

WALFRED AUGUSTSON TO CRESCENT

WALFRED AUGUSTSON recently became Superintendent of Van Dusen-Harrington's Crescent Elevator in Minneapolis, succeeding Peter E. Johnson, who retired.

BEAKEY TO LEGION

WILLIAM JENNINGS BRYAN BEAKEY, perennial candidate for Board of Trade Legion Post office for many years past, was just elected Senior Vice Commander. The "Hay-Fever" candidate (he runs every year) is Secretary of the Chicago Chapter SOGES and otherwise associated with Grain & Feed Journals. Inasmuch as the formal installation of new officers will not be held until next fall, something will doubtless prevent "WJB" from taking office.

START MEETINGS SEPT. 1

"J.I.T.", or, by its fuller name, Job Instructor Training, is to be the first topic of discussion on the SOGES Chicago Chapter's September 1st meeting. Theme of the first of its series of monthly meetings will be "Your Plant in War Time", and lead-off speaker Leonard Lynch, head of the government's War Man-Power Commission.

Program Committee Chairman Emil Buelens of The Glidden Company calls attention to the value of this work due to the extraordinary rapid turnover in employees these days. The government has set up this free advisory service to help alleviate this stress and strain.

"How To Train The Man On The Job" and "Industrial Safety Engineering Training", further efforts in conserving vital man-power in these pressing times, will be additional angles treated, the latter by Mr. Steve Halec, Safety Director of The Glidden Company, where both plans have worked out well. Mr. Halec is rated as one of the best equipped men in his line, is a War-Time Safety Instructor for WPB, and has an enviable safety record for his company's plant which has been entered in the past six SOGES Safety Contests.

CONGRATULATES PEAVEY SUPS

I THINK the Peavey people are to be congratulated on the way they are enlisting in the Society's Annual Safety Contest, and know the other members feel the same way about it.—James Auld, Hales & Hunter Company, Minneapolis Chapter Secretary.

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